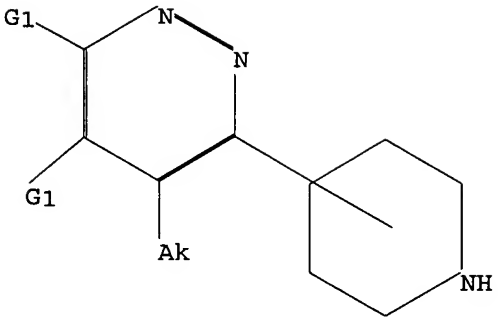
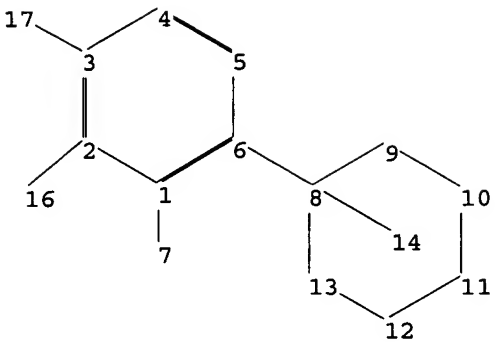




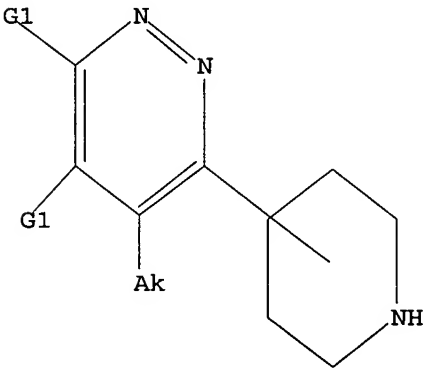
chain nodes :
7 16 17
ring nodes :
1 2 3 4 5 6 8 9 10 11 12 13
chain bonds :
1-7 2-16 3-17
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-13 8-9 9-10 10-11 11-12 12-13
exact/norm bonds :
1-7 2-16 3-17 8-13 8-9 9-10 10-11 11-12 12-13
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

G1:Cb,Hy

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:CLASS 16:CLASS 17:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 Cb,Hy

Structure attributes must be viewed using STN Express query preparation.

```
=> s l1
SAMPLE SEARCH INITIATED 15:10:05 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     4592 TO ITERATE

 43.6% PROCESSED     2000 ITERATIONS                                  0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        87777 TO    95903
PROJECTED ANSWERS:               0 TO        0

L2            0 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 15:10:14 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    89637 TO ITERATE

100.0% PROCESSED    89637 ITERATIONS  (     1 INCOMPLETE)         3 ANSWERS
SEARCH TIME: 00.00.04

L3            3 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     166.94     167.15

FILE 'CAPLUS' ENTERED AT 15:10:23 ON 15 MAR 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 15 Mar 2006  VOL 144 ISS 12
FILE LAST UPDATED: 14 Mar 2006  (20060314/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

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=> s l3
L4            2 L3
```

=> d ibib abs hitstr tot

own work

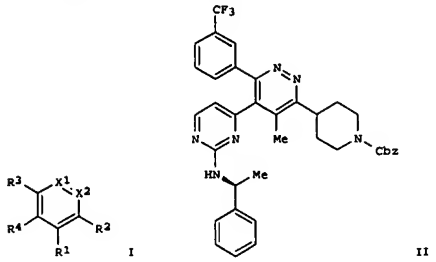
L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:927172 CAPLUS
DOCUMENT NUMBER: 141:395567
TITLE: Preparation of substituted pyridazines and analogs for treatment of TNF-α, IL-1β, IL-6, and/or IL-8 mediated disorders
INVENTOR(S): Dominguez, Celia; Goldberg, Martin H.; Tamayo, Nuria A.
PATENT ASSIGNEE(S): Amgen Inc., USA
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004094379	A2	20041104	WO 2004-US11953	20040415
WO 2004094379	A3	20050331		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004254178	A1	20041216	US 2004-826982	20040415
EP 1628665	A2	20060301	EP 2004-750293	20040415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				

PRIORITY APPLN. INFO.: US 2003-463697P P 20030416
WO 2004-US11953 W 20040415

OTHER SOURCE(S): MARPAT 141:395567
GI

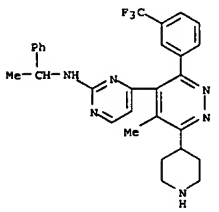


I II

AB Title compds. I (wherein X1, X2 = independently (un)substituted CH, N; with the proviso that at least one of X1 and X2 = N; R1 = (halo)alkyl, CN, NO2, acyl, carboxy, carbamoyl, alkoxy, sulfamoyl, ureido, etc.; R2 = alkyl, Ph, PhCH2, heterocyclyl, etc.; R3, R4 = independently (un)substituted Ph, naphthyl, heterocyclyl; or pharmaceutically acceptable salts thereof] were prepared as TNF-α, IL-1β, IL-6, and/or IL-8 inhibitors. For example, a multi-step synthesis concluding with the reaction of 4-[5-(2-methanesulfonylpyrimidin-4-yl)-4-methyl-6-(3-trifluoromethylphenyl)pyridazin-3-yl]piperidine-1-carboxylic acid benzyl ester and (S)-(-)-1-phenylethylamine gave II. The latter inhibited lipopolysaccharide-activated THP1 cell TNF-α production with IC50 <20 μM. Thus, I and their pharmaceutical compns. are useful for the treatment of inflammation, rheumatoid arthritis, Paget's disease, osteoporosis, multiple myeloma, uveitis, acute or chronic myelogenous leukemia, pancreatic b cell destruction, osteoarthritis, rheumatoid spondylitis, gouty arthritis, inflammatory bowel disease, adult respiratory distress syndrome (ARDS), psoriasis, Crohn's disease, allergic rhinitis, ulcerative colitis, anaphylaxis, contact dermatitis, asthma, muscle degeneration, cachexia, Reiter's syndrome, type I diabetes, type II diabetes, bone resorption diseases, graft vs. host reaction, Alzheimer's disease, stroke, myocardial infarction, ischemia reperfusion injury, atherosclerosis, brain trauma, multiple sclerosis, cerebral malaria, sepsis, septic shock, toxic shock syndrome, fever, myalgias due to HIV-1, HIV-2, HIV-3, cytomegalovirus (CMV), influenza, adenovirus, the herpes viruses, or herpes zoster infection (no data).

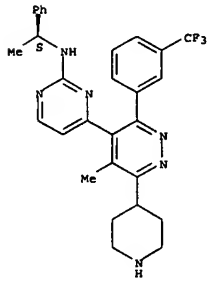
IT **786705-19-9P**, [4-[5-Methyl-6-(piperidin-4-yl)-3-(3-trifluoromethylphenyl)pyridazin-4-yl]pyrimidin-2-yl](1-phenylethyl)amine **786705-25-7P**, [4-[5-Methyl-6-(piperidin-4-yl)-3-(3-trifluoromethylphenyl)pyridazin-4-yl]pyrimidin-2-yl]((S)-1-phenylethyl)amine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(TNF and/or IL inhibitor; prepn. of substituted pyridazines and analogs as TNF and IL inhibitors for treatment inflammation, pain, and other disorders)

RN 786705-19-9 CAPLUS
CN 2-Pyrimidinamine, 4-[5-methyl-6-(4-piperidinyl)-3-[3-(trifluoromethyl)phenyl]-4-pyridazinyl]-N-(1-phenylethyl)- (9CI) (CA INDEX NAME)



RN 786705-25-7 CAPLUS
CN 2-Pyrimidinamine, 4-[5-methyl-6-(4-piperidinyl)-3-[3-(trifluoromethyl)phenyl]-4-pyridazinyl]-N-[(1S)-1-phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1971:552352 CAPLUS
DOCUMENT NUMBER: 75:152352
TITLE: Polymeric heterocyclic nitrogen compositions
INVENTOR(S): Marvel, Carl S.; Fabbro, Domenico
PATENT ASSIGNEE(S): Research Corp.
SOURCE: U.S., 2 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3598766	A	19710810	US 1968-773676	19681105
PRIORITY APPLN. INFO.:			US 1968-773676 A	19681105

GI For diagram(s), see printed CA Issue.
AB Polymers IIV having heat stability were prepared by the selfcondensation of
aromatic amines in the presence of polyphosphoric acid. The selfcondensation of HCl salts of 1,2,4,5-tetraaminobenzene, 3,3',4,4'-tetraaminodiphenyl ether, 3,3'-diaminobenzidine, and 3,3', 4,4'-tetraaminodiphenyl sulfone at 250-350° gave poly(1,2,4,5 - tetraaminobenzene) (I), poly(3,3',4,4'-tetraaminodiphenyl ether) (II), poly(3,3'-diaminobenzidine) (III), and poly(3,3',4,4'-tetraaminodiphenyl sulfone) (IV), resp. I lost 10% of its weight at ≤600°. II and III lost 14 and 20%, resp., of their wts. at ≤900°.
IT 34409-58-0
RL: PRP (Properties)
(heat resistance of)
RN 34409-58-0 CAPLUS
CN Poly(1,2:4,5-benzenetetrayl-4,5-diimino) (8CI, 9CI) (CA INDEX NAME)